

REMARKS

Claims 1-20 are pending. By this Amendment, claims 1, 7, 13 and 17 are amended. The courtesies extended to Applicants' representative by Examiner Lewis at the interview held March 25 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute the record of the interview.

I. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1-20 under 35 U.S.C. §103(a) over Gates (U.S. Patent No. 6,531,997 B1) in view of Inoue (JP 401086116A). The rejection is respectfully traversed.

In particular, neither Gates nor Inoue, individually or in combination, discloses or suggests a voltage applying component by which a voltage is applied to the display side electrodes and the rear side electrodes both contributing to image display to generate therebetween a potential difference which triggers particle movement, and about simultaneously a voltage is applied to the display side electrodes and the rear side electrodes, in which at least one of the display side electrodes and the rear side electrodes do not contribute to image display, to generate therebetween a potential difference which is smaller than the potential difference which triggers particle movement, as recited in independent claim 1, and similarly recited in independent claims 7, 13 and 17.

Gates disclose in Figs. 3D and 3F, applications of a pre-addressing pulse that has a first polarity, a first magnitude as a function of time and a first duration, followed by the second addressing signal that has an opposite polarity, and a second magnitude as a function of time, and a second duration that results in a net zero average applied field if the integral of the first magnitude as a function of time integrated over the first duration is numerically equal

to the integral of a second magnitude as a function of time integral integrated over the second duration (see col. 18, lines 58-66).

For example, in Fig. 3D, at time t_1 , a negative pulse 2 of amplitude $-V_0$ is applied across electrodes 30 and 40 (see Fig. 3B). This negative pulse is maintained until time t_2 , for a duration given by $t_2 - t_1$. At a time t_3 , a positive signal 4 of amplitude V_0 is applied across electrodes 30 and 40 (see Fig. 3C). The strength of the negative pulse 2 is equal and opposite to that of the positive signal 4. Thus, the net effect of applying the pulse 2 and the signal 4 is a change of state of the display element from that depicted in Fig. 3A to that depicted in Fig. 3C with zero average net field having been applied to the display element (see col. 19, lines 14-32).

For example, in Fig. 3F, a positive addressing signal 16 precedes the negative pulse 18 so long as a negative pulse does not have sufficient amplitude to cause the particles 15 to move within capsule 20. In the embodiment depicted in Fig. 3F, the negative pulse 18 and the positive signal 16 have equal strength as measured by the area of each (see col. 19, lines 38-44).

Nowhere does Gates disclose that the voltage waveform 4 in Fig. 3D is applied about simultaneously as the voltage waveform 18 of Fig. 3F. In fact, Fig. 3D and Fig. 3F are two separate voltage-time waveforms. Therefore, Gates does not disclose or suggest the above-noted features of claim 1.

Additionally, Gates does not disclose or suggest display side electrodes which are linearly disposed at the side of the display substrate in a predetermined direction, rear side electrodes which are linearly disposed at the side of the rear substrate in a direction intersecting the predetermined direction, as recited in independent claim 1, and similarly recited in independent claims 7, 13 and 17.

Gates discloses at col. 26, lines 4-7 that the display is provided, on its front or viewing surface (top surface as illustrated in Figs. 9A and 9B) with a common, transparent front electrode. Further, Gates discloses at col. 26, lines 3-41 that it uses an active matrix liquid crystal display. Stated differently, the structure that Gates discloses is different from that recited in the claims.

Inoue does not make up for the above-noted deficiencies of Gates. Inoue discloses in Fig. 1 that the elements 1 are glass sheets of an electrophoretic display device. Nowhere does Inoue disclose or suggest the features of claim 1.

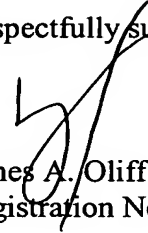
Thus, independent claim 1 define patentable subject matter. Independent claims 7, 13 and 17 also define patentable subject matter for similar reasons as discussed with respect to independent claim 1. Claims 2-6, 8-12, 14-16 and 18-20 depend from the respective independent claims, and therefore also define patentable subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,


James A. Oliff
Registration No. 27,075

Yong S. Choi
Registration No. 43,324

JAO:YSC/djb

Date: March 29, 2004

Attachment:
Petition for Extension of Time

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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